

10/750683

Refine Search

Your wildcard search against 10000 terms has yielded the results below.

Your result set for the last L# is incomplete.

The probable cause is use of unlimited truncation. Revise your search strategy to use limited truncation.

Search Results -

Terms	Documents
L12 and suspens\$ and (damp\$ with coef\$) and ((mass\$ and damp\$ and stiff\$) with matri\$)	2

Database:

US Pre-Grant Publication Full-Text Database
 US Patents Full-Text Database
 US OCR Full-Text Database
 EPO Abstracts Database
 JPO Abstracts Database
 Derwent World Patents Index
 IBM Technical Disclosure Bulletins

Search:

L13

Search History

DATE: Friday, October 27, 2006 [Purge Queries](#) [Printable Copy](#) [Create Case](#)

<u>Set</u> <u>Name</u> side by side	<u>Query</u>	<u>Hit</u> <u>Count</u>	<u>Set</u> <u>Name</u> result set
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR			
L13	L12 and suspens\$ and (damp\$ with coef\$) and ((mass\$ and damp\$ and stiff\$) with matri\$)	2	L13
L12	l8 or l9 or l10 or l11	16	L12
DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR			
L11	(5358305)! [PN]	1	L11
DB=USPT,DWPI; THES=ASSIGNEE; PLUR=YES; OP=OR			
L10	("5536059" "US20050038584A") [ABPN1,NRPN,PN]	3	L10
L9	("5536059" "US20050038584A") [URPN]	12	L9
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES;			

OP=OR

<u>L8</u>	L7 and (spring\$ near3 coeff\$)	2	<u>L8</u>
<u>L7</u>	L6 and (vehicle or automobile or car)	4	<u>L7</u>
<u>L6</u>	l4 or L5	6	<u>L6</u>
<u>L5</u>	suspens\$ and (damp\$ with coef\$) and ((mass\$ and damp\$ and stiff\$) with matri\$) and @pd<=20030813	6	<u>L5</u>
<u>L4</u>	L3 and ((mass\$ and damp\$ and stiff\$) with matri\$)	6	<u>L4</u>
<u>L3</u>	suspens\$ and (damp\$ with coef\$) and ((mass\$ or damp\$ or stiff\$) with matri\$) and @pd<=20030813	23	<u>L3</u>
<i>DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR</i>			
<u>L2</u>	suspens\$ and (damp\$ with coef\$) and ((mass\$ or damp\$ or stiff\$) with matri\$) and @ad<=20030813	21	<u>L2</u>
<u>L1</u>	5369709.pn. or 5838812.pn.	2	<u>L1</u>

END OF SEARCH HISTORY

Hit List

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Search Results - Record(s) 1 through 6 of 6 returned.

☐ 1. Document ID: US 6170202 B1

L6: Entry 1 of 6

File: USPT

Jan 9, 2001

US-PAT-NO: 6170202

DOCUMENT-IDENTIFIER: US 6170202 B1

TITLE: Building system using shape memory alloy members

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstracts	References	Claims	KWIC	Draw De
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☐ 2. Document ID: US 6077302 A

L6: Entry 2 of 6

File: USPT

Jun 20, 2000

US-PAT-NO: 6077302

DOCUMENT-IDENTIFIER: US 6077302 A

TITLE: System and method for analyzing and designing vibration isolators

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstracts	References	Claims	KWIC	Draw De
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☒ 3. Document ID: US 5765313 A

L6: Entry 3 of 6

File: USPT

Jun 16, 1998

US-PAT-NO: 5765313

DOCUMENT-IDENTIFIER: US 5765313 A

TITLE: Method and apparatus for real-time structure parameter modification

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstracts	References	Claims	KWIC	Draw De
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☒ 4. Document ID: US 5536059 A

L6: Entry 4 of 6

File: USPT

Jul 16, 1996

US-PAT-NO: 5536059

DOCUMENT-IDENTIFIER: US 5536059 A

TITLE: Seat suspension system using human body responses

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw De
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A

5. Document ID: US 5526609 A

L6: Entry 5 of 6

File: USPT

Jun 18, 1996

US-PAT-NO: 5526609

DOCUMENT-IDENTIFIER: US 5526609 A

TITLE: Method and apparatus for real-time structure parameter modification

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw De
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A 6. Document ID: US 20050038584 A1, JP 2005059835 A, DE 10361377 A1, CN
A1579823 A, =K R200501737 6A

L6: Entry 6 of 6

File: DWPI

Feb 17, 2005

DERWENT-ACC-NO: 2005-172365

DERWENT-WEEK: 200646

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TITLE: Designing method of vehicle suspension system involves normalizing linear matrix equation using similarity transform matrix including degrees of freedom of suspension system and number of independent actuators, with several matrices

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw De
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Fwd Refs

Bkwd Refs

Generate OACS

Terms

Documents

L4 or L5

6

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End of Result Set

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L7: Entry 4 of 4

File: DWPI

Feb 17, 2005

DERWENT-ACC-NO: 2005-172365

DERWENT-WEEK: 200646.

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TITLE: Designing method of vehicle suspension system involves normalizing linear matrix equation using similarity transform matrix including degrees of freedom of suspension system and number of independent actuators, with several matrices

INVENTOR: KIM, J H

PATENT-ASSIGNEE: HYUNDAI MOTOR CO (HYUNN), HYUNDAI MOTOR CO LTD (HYUNN), GENDAI JODOSHA KK (GENDN), KIM J. H (KIMJI)

PRIORITY-DATA: 2003KR-0056189 (August 13, 2003)

[Search Selected](#)[Search ALL](#)[Clear](#)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<input type="checkbox"/> <u>US 20050038584 A1</u>	February 17, 2005		015	B60G023/00
<input type="checkbox"/> <u>JP 2005059835 A</u>	March 10, 2005		020	B60G017/015
<input type="checkbox"/> <u>DE 10361377 A1</u>	March 17, 2005		000	B60G017/00
<input type="checkbox"/> <u>CN 1579823 A</u>	February 16, 2005		000	B60G017/015
<input type="checkbox"/> <u>=K R200501737 6A</u>	May 2, 2020	0	400	B60G017/00

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
US20050038584A1	December 31, 2003	2003US-0750683	
JP2005059835A	December 12, 2003	2003JP-0415776	
DE 10361377A1	December 29, 2003	2003DE-1061377	
CN 1579823A	December 31, 2003	2003CN-1012421	

INT-CL (IPC): ~~B60G~~ 17/00; B60G 17/015; B60G ~~23/00~~

ABSTRACTED-PUB-NO: US20050038584A

BASIC-ABSTRACT:

NOVELTY - The method involves formalizing a vehicle suspension system by satisfying a linear matrix equation and normalizing the equation using similarity transform matrix that includes the degrees of freedom of the suspension system and the number of independent actuators, with a mass matrix, a damping matrix and a stiffness matrix.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for the vehicle suspension system.

USE - For designing vehicle suspension system.

ADVANTAGE - Reduce vibration and enhanced the performance of the suspension system by efficiently determining predetermined factors e.g. spring coefficient, damping coefficient and the mounting positions of the springs and dampers.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the vehicle suspension system.

Sensor unit 110

Wheels 120

Dampers 130

Springs 140

Controller 150

ABSTRACTED-PUB-NO: US20050038584A
EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.1/6

DERWENT-CLASS: Q12 X22
EPI-CODES: X22-M;

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L8: Entry 1 of 2

File: USPT

Jul 16, 1996

US-PAT-NO: 5536059

DOCUMENT-IDENTIFIER: US 5536059 A

TITLE: Seat suspension system using human body responses

DATE-ISSUED: July 16, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Amirouche; Farid M. L.	Highland Park	IL		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
University of Illinois	Chicago	IL			02

APPL-NO: 08/334153 [PALM]

DATE FILED: November 4, 1994

INT-CL-ISSUED: [06] B60N 2/52

INT-CL-CURRENT:

TYPE IPC	DATE
CIPP <u>B60 N 2/50</u>	20060101

US-CL-ISSUED: 296/65.1; 188/299, 248/550, 248/566, 267/131, 280/707

US-CL-CURRENT: ~~296/65.1~~ ²⁶⁶ 02; ~~188/266.1~~ ^B 248/550, ~~248/566~~ ^{560 562} 267/131

FIELD-OF-CLASSIFICATION-SEARCH: 296/65.1, 180/282, 280/707, 280/714, 188/299, 267/131, 248/550, 248/559, 248/566, 364/424.05

See application file for complete search history.

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

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PAT-NO

ISSUE-DATE

PATENTEE-NAME

US-CL

5358305

October 1994

Kaneko et al.

296/65.1

ART-UNIT: 312

PRIMARY-EXAMINER: Pike; Andrew C.

ATTY-AGENT-FIRM: Banner & Allegretti, Ltd.

ABSTRACT:

An active seat suspension system for equipment that transfers vibration to a human operator provides human body vibration control and, thus, a more comfortable environment for the operator. The system utilizes a "man in a loop" control strategy, where both the equipment and human operator model are analyzed as a dynamic system. The seat suspension parameters are evaluated through optimization, which assumes, under normal stochastic conditions, that the vibratory inputs to the system are unknown. A controller estimates their values in real time, and a preferred characteristic force between the seat and machinery is determined. The characteristic force determined minimizes a cost function. Using an output from the controller, an actuator (which may be either active or semi-active) substantially applies the characteristic force between the seat and machinery, resulting in reduced vibration being transmitted to the human operator.

8 Claims, 12 Drawing figures

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